

PS4226.01 SEISMIC SAFETY - NEW CONSTRUCTION



U.S. Department of Justice
Federal Bureau of Prisons

Program

Statement

OPI: ADM
NUMBER: 4226.01
DATE: October 2, 1996
SUBJECT: Seismic Safety -
New Construction

1. PURPOSE AND SCOPE. To prescribe procedures to verify that Bureau construction projects:

- # comply with appropriate seismic design and construction standards,
- # identify seismic deficiencies, and
- # ensure corrective measures are taken at existing Bureau structures.

In this Program Statement, "seismic" refers to an earth vibration caused most commonly by earthquakes and explosions, and "seismic survey" refers to an inspection to determine a structure's potential resistance to such vibrations.

2. PROGRAM OBJECTIVES. The expected results of this program are:

a. All new construction projects and any existing buildings or in-progress construction projects for which the development of detailed plans and specifications commenced after January 5, 1990, will comply with the requirements established in Executive Order 12699 and 41 CFR Part 128-1.

b. Any seismic deficiencies in existing buildings, additions, or renovations will be reviewed and a plan-of-action developed to bring them into compliance with applicable UBC, NBC, or SBC codes.

3. DIRECTIVES AFFECTED

a. Directives Rescinded. None.

b. Directives Referenced

PS 4200.09	Facilities Operations Manual (04/03/96)
PS 4220.03	Facilities Development Manual (06/01/94)
PS 8041.02	FPI Factory Construction and Activation Program (09/27/95)

EO 12699 Seismic Safety of Federal and Federally Assisted
 or Regulated New Building Construction (01/05/90)

c. Rules referenced in this Program Statement are contained in 41 CFR Part 128-1, Department of Justice, Justice Management Division, Seismic Safety Program.

4. STANDARDS REFERENCED

a. American Correctional Association Foundation/Core Standards for Adult Correctional Institutions: FC2-4026.

b. American Correctional Association 3rd Edition Standards for Adult Correctional Institutions: 3-4120.

c. American Correctional Association Foundation/Core Standards for Adult Local Detention Facilities: FC2-5025.

d. American Correctional Association 3rd Edition Standards for Adult Local Detention Facilities: 3-ALDF-2A-01.

5. SEISMIC STANDARDS. Executive Order 12699 requires that certain types of Federally owned and leased construction comply with appropriate seismic design and construction standards. These requirements pertain to three types of construction:

- # New building construction;
- # Renovations to existing structures if development of detailed plans and specifications commenced after January 5, 1990; and
- # Additions to existing structures if development of detailed plans and specifications commenced after January 5, 1990.

The Department of Justice (DOJ) published 41 CFR Part 128-1 on August 12, 1993, establishing the DOJ Seismic Safety Program. The seismic safety requirements in the following building codes satisfy the requirements of the Order and 41 CFR Part 128-1:

- # 1991 International Conference of Building Officials (ICBO) Uniform Building Code (UBC).
- # 1992 Supplement to the Building Officials and Code Administrators (BOCA) National Building Code (NBC).
- # 1992 Amendments to the Southern Building Code Congress (SBCC) Standard Building Code (SBC).

Should the code in use in a particular locality be more stringent than these model codes, the local code shall be considered the standard for all seismic construction requirements in that jurisdiction.

6. PROGRAM REQUIREMENTS

a. New Construction, Renovations, and Additions. An individual familiar with the applicable code's seismic design provisions must review the structural design of a new building, addition, or renovation. A qualified structural engineer must conduct the review if architectural and engineering (A&E) services have been contracted for any part of the design. The reviewer must sign the approved design documents and provide a letter certifying compliance.

b. Impact on Existing Facilities. The design of additions or renovations to existing buildings must account for any effect new construction will have on the existing portion's seismic resistance. An individual familiar with the applicable code's seismic design provisions must review the design. A qualified structural engineer must conduct the review if A&E services have been contracted for any part of the design. The reviewer must sign the approved design documents and include a statement regarding any effects the addition or renovation will have on the seismic resistance of the existing structure.

c. Retroactive Application. All existing buildings, when development of detailed plans and specifications commenced after January 5, 1990, must be reviewed for compliance with the Order. The review must be conducted by an individual familiar with the applicable code's seismic design provisions. The review must be conducted by a qualified structural engineer if A&E services were contracted for any part of the original design.

A plan of action shall be developed and implemented to bring deficient buildings into compliance. Any completed projects where design documents were previously certified as in compliance do not require additional review.

7. RESPONSIBILITIES

a. Central Office - Facilities Programs Section

- # Monitor efforts to upgrade the seismic safety of structures, including monitoring and recording costs, construction, and other activities.
- # Provide guidance to regional offices and institution staff regarding the priority given to various existing structure types to be included in seismic surveys.
- # Prepare and submit an annual Seismic Safety Program status report, as required by 41 CFR Part 128-1.8004(b)(4), at the time stipulated by the DOJ Seismic Safety Coordinator.

b. Central Office - Construction Contracting Section. Shall ensure that statements verifying compliance are maintained for all design contracts administered through the section for work covered by the Order initiated after August 12, 1993.

Statements verifying compliance for projects when design was initiated prior to this Program Statement's issuance and after August 12, 1993, shall be obtained within one year of this Program Statement's issuance.

c. Central Office - Design and Construction Branch. Ensure that statements verifying compliance are maintained for all design contracts when the notice to proceed was given after January 5, 1990, and before August 12, 1993.

Statements verifying compliance for projects initiated after January 5, 1990, and before August 12, 1993, shall be obtained within one year of this Program Statement's issuance.

d. Regional Offices

Ensure that existing construction not previously outlined as the responsibility of Central Office, when development of detailed plans and specifications commenced after January 5, 1990, is assessed for compliance. The assessment may be a review of the as-built drawings by an individual familiar with the applicable code's seismic design provisions, and by a qualified structural engineer if A&E services were contracted for any part of the original design. The reviewer shall prepare a report stating the level of compliance.

Undertake an on-site seismic survey if the preceding process does not determine whether construction is adequate, or if the review determines that deficiencies exist. A report detailing the survey findings shall identify deficiencies and recommend corrective action. The report shall be completed by an individual familiar with the applicable code's seismic design provisions. This report shall be completed by a qualified structural engineer if A&E services were contracted for any part of the original design.

Identification of construction in this category shall be completed within one year of this Program Statement's issuance. Necessary reviews, on-site seismic surveys, remedial work, and certification of compliance shall be completed within six years of issuance.

Ensure a compliance review is completed for any project involving new construction or work altering the seismic safety of an existing building. The review shall be

conducted by an individual familiar with the seismic provisions of the applicable code, and by a qualified structural engineer if A&E services were contracted for any part of the original design.

Identification of construction in this category shall be completed within one year of the date of this Program Statement's issuance. Necessary reviews, on-site seismic surveys, remedial work, and compliance certification shall be completed within six years of issuance.

- # The Regional Facilities Administrator shall maintain certifications verifying compliance, except when the notice to proceed for contracted design services was given after August 12, 1993, in which case the appropriate contracting officer shall maintain certifications. Certifications shall be obtained within one year of this Program Statement's issuance.
- # Copies of all completed reports related to seismic safety shall be forwarded to the Chief, Facilities Programs.

e. Institutions

- # Provide on-site assistance if required during the performance of seismic surveys.
- # Submit funding requests to the regional office for future Line Item and Repair and Improvement projects resulting from recommendations included in seismic surveys.
- # Address any survey recommendations that can be handled through major work orders and minor work requests.
- # Ensure the Facility Manager completes and maintains reviews for projects initiated at the institution that involve new construction or work altering an existing building's seismic safety when development of detailed plans and specifications commenced after January 5, 1990. An individual familiar with the applicable code's seismic design provisions must conduct this review. A qualified structural engineer must complete this review if A&E services have been contracted for any part of the design.

Identification of construction in this category shall be completed within one year of this Program Statement's issuance. Necessary reviews, on-site seismic surveys, remedial work, and certification of compliance shall be completed within six years of the date of issuance.

f. Federal Prison Industries (FPI)

- # Address any deficiencies in FPI buildings reported as a result of seismic surveys.
- # Provide funds to correct deficiencies within six years of this Program Statement's issuance.

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Director